

DEUTSCHE ZUSAMMENARBEIT





Technical and Vocational Education and Training (TVET)

INTEGRATION OF SOCIAL AND ECOLOGICAL SUSTAINABILITY TOPICS IN THE CURRICULUM OF DIPLOMA IN TEXTILE ENGINEERING

# **IMPLEMENTATION**

With the support of the Bangladesh Technical Education Board (BTEB) and the Department of Textile (DoT), a study titled "Making TVET in Bangladesh Future-Proof: Textile Diploma Curriculum and Industry Needs Assessment for Green Transformation" (for full study scan the QR code in imprint section) was conducted to evaluate the existing textile diploma curricula through the lens of social and ecological sustainability.

A team of experts from academia, industry, and government developed two new modules, "Sustainability in Textile Industry" and "Compliance in Textile Industry," and improved two existing modules, "Environmental Studies" and "Industrial Management." All four modules were validated by the BTEB in March 2023.

Following a comprehensive Training Needs Assessment (TNA), teacher training modules were prepared and delivered to enhance technical skills in environmental and sustainability practices, as well as pedagogical capacities. Teachers from selected private institutions were also included in the technical training to ensure the new curricula are implemented across all public and private textile diploma institutes.

To support teachers, the team of consultants provided online group coaching, feedback sessions, weekly exchanges, and on-site observations before and during teaching. Teaching packages were prepared, and four textbooks printed by the BTEB are now being utilised by teachers and students.















#### **KEY RESULTS**



#### **CURRICULUM ENHANCEMENT**

Added two new modules (Sustainability, Compliance) and revamped two generic modules (Environmental Studies, Industrial Management) in the textile diploma curriculum, implemented in 242 textile institutes



#### **STUDENT ENGAGEMENT**

Around 4,000 students from textile institutes are benefiting from the improved curriculum



#### **EXPANDED INTEGRATION**

Revised generic modules are integrated into 17 diploma specializations, covering 1,099 diploma engineering institutes



#### **EDUCATIONAL RESOURCES**

Published four textbooks and developed comprehensive digital teacher training packages



Trained 97 teachers from 13 institutions on technical content and pedagogy



#### SPECIALISED QUALIFICATION

Developed a specialised qualification in Sustainability Management for professionals in the RMG and Textile sectors

# MAP

Piloting institutions are located in locations

- Tangail (Dhaka division)
- Sirajganj (Rajshahi division)
- Natore (Rajshahi division)
- Rangpur (Rangpur division)
- Khulna (Khulna division)
- Barishal (Barishal division)
- Chattogram (Chattogram division)

# **LESSONS LEARNT**



#### PHASED IMPLEMENTATION

Successful implementation requires four key phases; module validation, teacher training, preparation and translation of teaching materials, and execution with ongoing support



#### **COLLABORATIVE EFFORT**

A multi-disciplinary team is essential for creating, translating, and publishing effective teaching materials



#### LOCALISED TRAINING

Using a mix of local and international trainers ensures training is relevant and overcomes language barriers



#### ACCESSIBLE TOOLS

Simple teaching tools, supported by digital technology are most effective



#### ADAPTED TEACHING METHODS

Pedagogy and lesson plans must be tailored to fit local contexts, considering student numbers, school environments, teacher knowledge, and lesson duration

# **TIMEFRAME**

# 2021

- Partnership with BTEB
- MoU between GIZ and the German Brand KiK on practice-orientation in higher and vocational education
- Needs analysis study

# 2022

- ICON-INSTITUTE begins project implementation with experts from Bangladesh, Germany, France, and Singapore
- Inception workshop on module development with relevant stakeholders

# 2023

- Development and validation of 4 modules by BTEB
- Teacher training needs assessment
- Development of Pedagogy manual
- Training of teachers in four technical modules and
- Preparation and dissemination of two teaching packages (PowerPoint presentations, teacher workbooks, lesson plans)
- Start of implementation monitoring in 7 selected public institutions
- Publication and dissemination of the first textbook

# 2024

- Preparation and dissemination of two additional teaching
- Continued monitoring of teaching implementation in selected institutes
- Publication and dissemination of three more textbooks

# **WAY FORWARD**

The project has surpassed initial goals, and its sustainability and long-term success can be ensured through the following actions:



# **Develop Master Trainers**

Train master trainers to educate teachers in both private and public institutes



# Disseminate Knowledge

Share the four modules and pedagogy with teachers within their institutes



#### **Enhance Digital Proficiency** Improve teachers' skills in using digital technology

**Strengthen Industry Collaboration** Increase cooperation between TVET and the industry



# **Facilitate International Exchanges**

Organise international exchanges to learn best practices in TVET

# **QUOTES**

This HELD project, implemented by GIZ Bangladesh, has set a new benchmark for technical education in Bangladesh, elevating the quality and relevance of our programs.

# Chairman, BTEB

The integration of the new modules, along with the robust-training and ongoing support, has significantly enhanced my ability to teach and engage my students in meaningful ways

**Principal** Shahid Abdur Rab Serniabat Textile Institute Gournadi, Barishal

These new modules have been eye-opener. They've equipped me with essential skills in sustainability, making me feel confident and ready to contribute to the textile industry.

Student Textile Institute, Chattogram

Project	Higher Education and Leadership Development for Sustainable Textiles in Bangladesh (HELD)
Commissioned by	GermanFederal Ministry for Economic Cooperation and Development (BMZ)
Duration	01/2021 – 12/2024
Goal	To strengthen the application-oriented competencies of future specialists and managers of the textile industry in sustainable corporate management.
Implementing partner	Bangladesh Technical Education Board (BTEB)
Strategic partners	Department of Textile (DoT) KiK Textilien und Non-Food GmbH

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